ROCKY FLATS CITIZENS ADVISORY BOARD

MINUTES OF WORK SESSION

May 6, 1999

FACILITATOR: Reed Hodgin, AlphaTRAC

Jim Kinsinger called the meeting to order at 6:10 p.m.

BOARD / EX-OFFICIO MEMBERS PRESENT: Carol Barker, Susan Barron, Ray Betts, Tom Davidson, Eugene DeMayo, Gerald DePoorter, Joe Downey, Tom Gallegos, Mary Harlow, Victor Holm, Jim Kinsinger, Bill Kossack, Tom Marshall, Mary Mattson, LeRoy Moore, Lesley Taufer, Bryan Taylor / Mariane Anderson, Steve Gunderson, Joe Legare, Tim Rehder

BOARD / EX-OFFICIO MEMBERS ABSENT: Alan Aluisi, Shawn Burke, Derek Dye, David Navarro, Linda Sikkema

PUBLIC / OBSERVERS PRESENT: Jessica Alcorn (IIIRM); Christopher T. Gurn (IIIRM); Mark Sautman (DNFSB); Roman Kohler (citizen); Virgene Ideker (Kaiser-Hill); Maby Mahboub (MERCO, Inc.); Tom Stewart (CDPHE); David Kenney (citizen); Sue Rice (Envirocare); J. Hoopes (Kaiser-Hill); Joan Seeman (Sierra Club); Bruce Dahm (City of Broomfield); Troy Lynn Yellowwood (citizen); Ken Korkia (CAB staff); Erin Rogers (CAB staff); Deb Thompson (CAB staff); Brady Wilson (CAB staff)

PUBLIC COMMENT PERIOD: No comments were received.

REGULATOR UPDATE (DNFSB): Mark Sautman, Rocky Flats site representative for the Defense Nuclear Facilities Safety Board, gave an overview of projects being tracked:

- 1) DNFSB site office staff will be increased to two full-time representatives beginning in July.
- 2) Recommendation 94-1 Update.
 - Residue characterization is complete. 15 categories to be processed at RFETS; 13 to be processed at the Savannah River Site; 18 reclassified as low risk and will be repacked; 51 confirmed as low risk; 2 are stable but need to address filter and drum corrosion issues.
 - Salts: 1200 kilograms repacked
 - Ash: 4200 kilograms repacked for WIPP
 - Sand, slag and crucible: 2800 kilograms repacked for shipment
 - Dry: 8000 kilograms repacked
 - Combustibles: All ion exchange resins and leaded gloves stabilized; 4700 kilograms repacked
 - Issues remaining to address: Whether residues can be shipped to SRS; delays

and shutdowns to address non-destructive assay issues; double handling of material; and HCl is being formed in some combustible residue drums and is corroding drums and plugging filters.

- Solutions. All tanks empty and high level solutions processed; tapping and draining of all actinide solutions in Building 371 to be completed by June 30; Building 771 tap and drain/process piping removal well underway, but slightly behind schedule.
- Metal and Oxide. Plutonium packaging system removed from Broomfield Warehouse and being installed in Building 371; packaging and stabilization to begin in December; classified metal shipments to SRS cannot start until the ROD is issued.

3) Other RFETS Issues in Process:

- The site's response to DNFSB's Y2K reporting requirement Rocky Flats' response to the reporting requirement has been good.
- High wind and tornado impacts to waste storage facilities
 - --- Rocky Flats did a thorough wind speed analysis; the initial analysis looked at the issue of a tornado-generated missile, such as having a piece of wood picked up by a tornado and slammed into a container and possibly puncturing it. DNFSB also asked the site to look into the possibility of the containers themselves becoming missiles. Rocky Flats performed an analysis which focused primarily on pipe overpack containers and on horizontal wind speed; the analysis was expanded then to include 55-gallon drums and scenarios where a container is picked up vertically and then dropped somewhere. After completing analysis, DNFSB did agree the containers could be safely stored as planned. Tornadoes are weaker here, and both the vertical and horizontal wind speeds would not likely be sufficient to cause severe damage to the containers.
- Worker protection during deactivation activities (e.g., glovebox size reduction)
- Work control
- Recommendation 94-3 upgrades to Building 371
 - --- In response to a question about a *Newsweek* article discussing 5,000+ pounds of missing plutonium, Mark stated what he knows about the situation. There are a variety of issues involved. Every time the containers are worked on, there must be an assay performed. The equipment used in the 1950s and 1960s is not as accurate as it is today, so there are detection errors. Probably a good portion of it has been buried in the TRU waste that Rocky Flats shipped to Idaho. Also, there is a lot of holdup because of the tap-and-drain processes being performed, as well as a great deal of holdup in the gloveboxes.
- HEPA filter reporting requirement
- Shift Manager/Shift Technical Advisor/Configuration Control Authority qualifications

APPROVAL OF PERSONNEL CONSULTANT: The Personnel Committee earlier in the week interviewed three bidders who responded to CAB's Request for Proposal for advisory services related to the Board's compensation, benefits, and personnel policies. The Board approved the Committee's recommendation that the job be awarded to HR Partnership, of Denver. The project will commence on May 10 and be completed by June 21. Funding for the project will not exceed \$5,000.

APPROVAL OF THE REQUEST FOR PROPOSALS: COMMUNITY RADIATION MONITORING PROGRAM (COMRAD): The Board had been asked by DOE to serve as grant administrator and pass-through agent for the ComRad program. An oversight panel, separate from CAB, has been established to monitor the project. At this meeting, the Board was asked to approve the Request for Proposals, which will be sent to recipients on May 10. The Board approved the draft RFP, with minor changes that were made prior to the meeting, and agreed to serve as the grant administrator for this project.

PRESENTATION AND DISCUSSION ON LABORATORY ANALYSIS

INFORMATION: Virgene Ideker, with Kaiser-Hill at RFETS, gave a brief presentation on the analytical services at Rocky Flats. She discussed the chain-of-custody, turnaround time, and suggested improvements.

There are several types of analytical data at Rocky Flats:

- Chemical involving organics, inorganics, water quality, waste characteristics
- Radiochemical isotopics by alpha spectrometry, isotopics by gamma spectrometry, liquid scintillation, and gross alpha/beta
- Biological coliform and whole effluent toxicity
- Bioassay samples of urine and/or feces, tissue samples and nasal smears
- Industrial Hygiene to conform with NIOSH and OSHA methods, sampling for exposure to asbestos and beryllium, and to sample breathing air
- Geochemical/Geotechnical Data

The process for sampling involves first planning what is to be sampled, preparing an analysis plan with data quality objectives, quality assurance and data delivery requirements, selecting a lab, identifying samples and preparing sampling instructions. The next step is the actual sampling, generating samples, collecting, labeling, then packaging and shipping. Laboratory analysis follows, where both hardcopy and electronic data is produced. The lab provides data assessment on the completeness and quality assurance verification of the data package, with 75% verification and 25% validation. Finally the data is released and distributed, then archived.

The normal analytical process flow is as follows:

- 1. <u>Sampling (usually takes 5 days)</u> scheduling, bottle and chain of custody preparation, preservation requirements
- 2. <u>Shipping (normally 2-3 days)</u> rad screen, preparation and packaging, 24-hour shipping to commercial labs
- 3. <u>Laboratory analysis (about 30 days)</u> chemistry analysis (up to 14 days); data analysis (7 days) data package preparation (7 days); data package shipment and receipt (2 days)
- 4. Data Assessment Partial verification takes 3 days, full verification takes 7 days,

and validation on average takes 30 days

For some types of analyses a faster turnaround is available. However, many regulatory analyses cannot be expedited due to chemistry and quality requirements. Also, expedited analyses can affect the schedules for other analyses, a faster turnaround time results in higher detection limits, and expedited analyses and smaller batches cost more. The analyses take time — the minimum time for chemistry analysis for isotopic plutonium is 7 days (water), or 14 days (solid); 7 days for semi-volatile organics; and 7 days for TCLP, or toxic characteristic leaching procedure.

The site is planning improvement initiatives to its analytical services. The goal is to improve the timeliness and quality of data by revising the electronic data deliverable process; reducing data assessment time; and developing incentives to meet the turnaround time — for subcontractors to the Analytical Services Division of ESS (Environmental Systems and Stewardship). Also, they will explore cost reduction alternatives, such as purchasing in capacity and awarding a national analytical contract.

PRESENTATION AND DISCUSSION ON T1 TRENCH PROJECT FINANCIAL REPORT: Site representative Norma Castaneda attended the Board meeting to give an overview of the recently completed Trench T1 Project and to specifically review the costs involved.

- Project planning cost \$1.6 million. This involved historical record searches, employees interviews, data evaluation, geophysical surveys, putting in place a procurement process, preparing documents, training, and performing readiness assessment. A major part of the cost involved with planning was the cost of personnel. Anywhere from 10-20 individuals were involved with the planning, some on a full-time basis.
- Site preparation and mobilization cost \$1.4 million. Here the site began to work on actual site grading, preparing a road base, putting in fencing and power, and conducting baseline surveys. In addition, they had to bring in equipment and materials such as trails, excavation and waste handling equipment, waste containers, personal protective equipment, and environmental monitoring instrumentation. This included the construction of the weather structure; the lease cost of the structure was about \$700,000. A total of 20 individuals worked inside the tent. Waste containers were also quite expensive. Many of the containers had to be fabricated to specification.
- Implementation cost \$5.4 million. Staff included a crew of 50 with support staff. Training drills were conducted and were a substantial cost. Also involved in the implementation phase was excavation; waste inerting, sampling and packaging; waste characterization radiological and chemical screening, gamma spectroscopy and laboratory analyses; equipment decontamination; structure release survey; and demobilization.

Planning for this project began in FY97, and the project was completed in FY99. The project finished within 3% of the original planned costs. A total of \$8.4 million was spent.

PUBLIC COMMENT PERIOD: No comments were received.

LOW LEVEL WASTE DISCUSSION: STORAGE AND DISPOSAL: In its continuing

discussion of low level waste issues in preparation of the Board's "vision," at this meeting CAB members entered into a discussion of the difference between "storage" and "disposal." The goal was to come up with a definition, or an agreement about which is more appropriate — onsite or offsite, storage or disposal. The focus was on: (1) storage (intended removal, easy to remove, separated from the environment), and (2) disposal (intended to leave permanently, hard to remove — may or may not be possible/practical, may either be isolated from the environment or not). Prior to the Board meeting, CAB members had engaged in a discussion via email about their thoughts on the differences between storage and disposal. Via email, one Board member suggested instead of focusing on storage versus disposal, that the Board consider using the term "containment." CAB members did feel comfortable with that definition, and worked through the process of creating a list of "values" that are shared about containment of low level waste. This following definition was agreed to by consensus:

Low Level Waste Containment — must be:

- **Isolated** will not enter the environment
- Monitored breach of containment will be detected in time to ensure isolation
- Retrievable can be managed and removed
- Secure will not be released from containment inadvertently or for malicious reasons

The Board will continue its discussion on low level waste at its next meeting May 17th. Some topics it will consider for future discussions are stewardship, and waste treatment technologies.

NEXT MEETING:

Date: May 17, 6:30 - 9:30 p.m. (study session)

Location: College Hill Library, Front Range Community College, 3705 West 112th Avenue, Westminster

Agenda: Continuation of Board vision discussion on low level waste disposition issues

ACTION ITEM SUMMARY: ASSIGNED TO:

1. Send out ComRad Program Request for Proposals on May 10 - Staff

MEETING ADJOURNED AT 9:30 P.M. *

(* Taped transcript of full meeting is available in CAB office.)

RESPECTFULLY SUBMITTED:

Mary Harlow, Secretary Rocky Flats Citizens Advisory Board

The Rocky Flats Citizens Advisory Board is a community advisory group that reviews and provides recommendations on cleanup plans for Rocky Flats, a former nuclear weapons plant outside of Denver, Colorado.

Top of Page | Index of Meeting Minutes | Home

Citizens Advisory Board Info | Rocky Flats Info | Links | Feedback & Questions